

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION

NEOCHLORIS, INC.

Plaintiff,

v.

EMERSON PROCESS MANAGEMENT  
POWER & WATER SOLUTIONS, INC. AND  
CITGO PETROLEUM CORPORATION

Defendants.

Case No.

**JURY TRIAL DEMANDED**

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**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Neochloris, Inc. ("Neochloris") complains of Defendants Emerson Process Management Power & Water Solutions, Inc. and CITGO Petroleum Corporation as follows:

**NATURE OF THE CASE**

1. This is a claim for patent infringement that arises under the patent laws of the United States, Title 35 of the United States Code. This Court has original jurisdiction over the subject matter of this claim under 28 U.S.C. §§ 1331 and 1338(a).

**PARTIES**

2. Neochloris is an Illinois corporation with offices at 3440 South Dearborn Street, Suite 136-South, Chicago, IL 60616. Neochloris owns and has standing to sue for infringement of United States Patent No. 6,845,336 ("the '336 Patent") entitled "Water Treatment Monitoring System," which issued on January 8, 2005, the inventors of which are Dr. Prasad S. Kodukula and Charles R. Stack. Neochloris is a green technology start-up founded by Dr. Prasad S. Kodukula and Charles R. Stack. Neochloris recently completed laboratory scale testing of its

patent-pending carbon remediation technology, which application utilizes the '336 patented technology, through research at the University of Illinois at Urbana-Champaign.

3. Defendant Emerson Process Management Power & Water Solutions, Inc. ("Emerson") is a Delaware corporation with corporate headquarters located at 200 Beta Dr., Pittsburgh, PA 15238. Emerson's registered agent, CT Corporation System, is located at 208 S. LaSalle St., Ste. 814, Chicago, IL 60604.

4. Emerson makes, uses, sells, offers for sale and/or imports water and wastewater system monitoring technology, including Emerson's Delta V system.

5. Defendant CITGO Petroleum Corporation ("CITGO") is a Delaware corporation with corporate headquarters located at 1293 Eldridge Parkway, Houston, TX, 77077. CITGO operates a petroleum refinery in this judicial district, located at 135th Street, Lemont, IL 60439. CITGO's registered agent, CT Corporation System, is located at 208 S. LaSalle St., Ste. 814, Chicago, IL 60604.

6. CITGO uses Emerson's Delta V system at its Lemont, Illinois refinery for raw water treatment and wastewater treatment as well as to control boilers, cooling towers and an API separator.

#### **JURISDICTION AND VENUE**

7. This Court has exclusive jurisdiction over the subject matter of this case under 28 U.S.C. 1338(a).

8. This Court has personal jurisdiction over Emerson because, among other things, it transacts business and has committed acts of infringement in this judicial district, including by making, using, selling, offering to sell and providing the Delta V system in this judicial district.

9. This Court has personal jurisdiction over CITGO because, among other things, it transacts business and has committed acts of infringement in this judicial district, including by using Emerson's Delta V system in this judicial district.

10. Venue is proper in this district under 28 U.S.C. §§ 1391(b)-(d) and 1400(b).

### **BACKGROUND**

11. In mid-2013, Neochloris became aware of Emerson's Delta V system and its infringement of the '336 patent. On August 6, 2013, Neochloris sent a letter to counsel for Emerson, including a detailed claim chart demonstrating infringement of the '336 patent by Emerson's Delta V system, in an effort to initiate licensing discussions and put Emerson on notice of the infringement.

12. On September 23, 2013, counsel for Neochloris participated in a telephone conference with legal counsel for Emerson, Mr. Woo Kim, and Emerson engineer Mike Sheldon. During the September 23, 2013 telephone discussion, Mr. Kim denied that Emerson's Delta V system infringed the '336 Patent. Mr. Kim stated, for example, that the computers used with Emerson's Delta V system were merely "dumb" computers. Counsel for Neochloris expressed their disagreement and pointed Mr. Kim to publicly available materials, including the materials relied on in the claim chart that Neochloris had prepared and sent to Emerson in advance of the call.

13. Following the September 23, 2013 telephone discussion, counsel for Neochloris continued to communicate with Mr. Kim regarding Emerson's infringement of the '336 patent, and provided Emerson with twenty-three specific written follow-up questions to help guide future discussions and in an effort to clarify Emerson's alleged non-infringement position regarding the '336 patent. Counsel for Emerson did not respond to the follow-up questions from Neochloris in writing but agreed to discuss the responses by phone.

14. Counsel for Neochloris persistently requested further discussion with Emerson in an effort to resolve the parties' disagreement regarding Emerson's infringement of the '336 Patent.

15. On January 10, 2014, counsel for Neochloris, along with the named inventors of the '336 patent, Dr. Prasad S. Kodukula and Charles R. Stack, participated in a telephone conference with Emerson's Woo Kim and Mike Sheldon regarding infringement of the '336 patent by Emerson's Delta V system.

16. During that telephone conference, Mr. Kim again emphatically denied that Emerson's Delta V system infringed the '336 Patent and claimed that there were "significant misunderstandings." For example, Mr. Kim again stated that the Delta V computer was a "dumb" computer but admitted that it was remote. In reference to a facility of American Crystal Sugar ("ACS") in East Grand Folks, MN, where Emerson's Delta V system is used, Mr. Kim also asserted that the Delta V system acted as an asset or device manager and only monitored the condition of probes (i.e. on or off) but did not acquire any actual data from the probes. Mr. Kim also denied any use of the Internet in data acquisition or process control. Furthermore, in response to seven of the twenty-three written follow-up questions submitted by Neochloris that specifically addressed alarms, including predictive as well as hierarchal, Mr. Kim denied any such alarm usage. He mentioned that the alarms were employed to indicate if an asset, for example, a pH probe, was on or off but not for any other use.

17. Following the January 10, 2014 telephone conference, Messrs. Kodukula and Stack conducted further independent investigation related to Emerson's Delta V system, including participating in discussions with end-users of Emerson's Delta V system and installation contractors familiar with Emerson's Delta V system. In the course of that investigation, Dr. Kodukula and Mr. Stack obtained information regarding Emerson's Delta V

system that contradicted the information that had been provided by Emerson's counsel Mr. Kim during the September 2013 and January 2014 telephone conferences.

18. On March 28, 2014, Charles Stack spoke with Mr. Zachary Bollinger, a controls engineer at ACS in East Grand Forks, MN regarding Emerson's Delta V system. Mr. Bollinger confirmed that ACS uses the Delta V system to collect wastewater data from their ponds using probes.

19. On May 9, 2014, Mr. Stack spoke with Chad Solberg, electrical/instrumentation Supervisor at ACS regarding Emerson's Delta V system. Mr. Solberg informed Mr. Stack that ACS uses probes to monitor various water characteristics, including temperature; pond levels, conductivity (ORP) and pond dissolved oxygen levels as well as hydrogen sulfide levels. Mr. Solberg explained that all of the data is sent to the ACS manufacturing plant control room and managed by the Delta V system.

20. On June 10, 2014, Mr. Stack and Dr. Kodukula spoke with Mr. Joe Wing of Novaspect, Inc., an Emerson distributor, located at 1124 Tower Road, Schaumburg, Illinois. Mr. Wing informed Messrs. Stack and Kodukula that many Novaspect clients, including American Crystal Sugar, CITGO, as well as other companies in the Midwest, use Emerson's Delta V system. He mentioned that it is common practice in these companies and industries to bring water and wastewater process information into Delta V control systems at manufacturing facilities.

21. On November 13, 2014, Mr. Stack spoke with Billy Chuck "BC" Spear, a plant engineer at CITGO's refinery in Lemont, Illinois regarding Emerson's Delta V system. Mr. Spear confirmed that CITGO uses Emerson's Delta V system at its Lemont refinery to control boilers, cooling towers and an API separator.

22. Mr. Spear further explained that CITGO uses Emerson's Delta V system for raw water treatment and wastewater treatment using activated sludge. He also stated that data is collected from the water and wastewater facilities using probes and that the data is accessible to CITGO operators via remote laptop computers using the Internet.

23. Mr. Spear also informed Stack that at CITGO's refinery in Lemont, Illinois, the Delta V system is remote from the water and wastewater treatment facilities, where the data is collected.

24. Spear further confirmed that at CITGO's refinery in Lemont, Illinois, alarms are extensively used to provide alerts to various personnel. Alarms are sent to plant personnel in a hierarchal fashion based on pre-designed limits to warn of process failures.

### **CLAIMS FOR PATENT INFRINGEMENT**

#### **COUNT I**

#### **INFRINGEMENT OF U.S. PATENT No. 6,845,336 BY EMERSON**

25. Neochloris re-alleges and incorporates by reference all of its allegations set forth in Paragraphs 1 through 24 above.

26. Emerson has had actual knowledge of infringement of the '336 Patent since at least August 5, 2013 and has known that its conduct constitutes infringement of the '336 Patent since at least that time.

27. Emerson has induced and continues to induce end-users of the Delta V system to infringe at least claims 13 and 17 of the '336 Patent within the meaning of 35 U.S.C. § 271(b). Such end-users specifically include CITGO's Lemont, Illinois refinery located at 135<sup>th</sup> Street, Lemont, Illinois.

28. Emerson's acts of inducement of the '336 Patent include, without limitation, making, using, selling and offering for sale the Delta V system, as well as creating and

disseminating promotional materials, marketing materials, and instruction guides that teach and encourage end-users to use the Delta V system in a manner that is covered by at least claims 13 and 17 of the '336 Patent.

29. Emerson has also contributed to the infringement of at least claims 13 and 17 of the '336 Patent within the meaning of 35 U.S.C. § 271(c). Specifically, Emerson has contributed to end-user's infringement of the '336 Patent by, among other things, making, selling and offering to sell the Delta V system, and by instructing, aiding, assisting, authorizing, advertising, marketing, promoting, providing and/or encouraging the offer for sale, sale and use of the Delta V system, which Emerson knows is especially made or adapted for use in an infringing manner, and which is not a staple article of commerce suitable for substantial non-infringing use.

30. Emerson's induced infringement and contributory infringement of the '336 Patent has injured Neochloris and Neochloris is entitled to recover damages adequate to compensate for such infringement, but in no event less than a reasonable royalty.

31. Emerson's infringing activities have injured and will continue to injure Neochloris unless and until this Court enters an injunction prohibiting further infringement and, specifically, enjoining further inducement to infringe and contributory infringement of the '336 Patent.

## **COUNT II**

### **INFRINGEMENT OF U.S. PATENT NO. 6,845,336 BY CITGO**

32. Neochloris re-alleges and incorporates by reference all of its allegations set forth in Paragraphs 1 through 24 above.

33. CITGO has infringed and continues to infringe at least claims 13 and 17 of the '336 Patent within the meaning of 35 U.S.C. § 271(a) through the foregoing activities including, without limitation, using and providing Emerson's Delta V system in the United States, including at its Lemont, Illinois refinery.

34. CITGO's direct infringement has injured Neochloris and Neochloris is entitled to recover damages adequate to compensate for such infringement, but in no event less than a reasonable royalty.

35. CITGO's infringing activities have injured and will continue to injure Neochloris unless and until this Court enters an injunction prohibiting further infringement and, specifically, enjoining further direct infringement of the '336 Patent.

**PRAYER FOR RELIEF**

WHEREFORE, Neochloris respectfully asks this Court to enter judgment against Emerson and CITGO and against each of their respective subsidiaries, successors, parents, affiliates, officers, directors, agents, servants and employees, and all persons in active concert or participation with Emerson and CITGO, granting the following relief:

- A. The entry of judgment in favor of Neochloris and against Emerson and CITGO;
- B. An award of damages adequate to compensate Neochloris for the infringement by Emerson and CITGO of United States Patent No. 6,845,336, but in no event less than a reasonable royalty as permitted by 35 U.S.C. § 284, together with prejudgment interest from the date the infringement began;
- C. Increased damages and/or attorneys' fees as permitted under 35 U.S.C. § 284 and § 285;
- D. A permanent injunction prohibiting further direct infringement, inducement of infringement and contributory infringement of the '336 Patent; and
- D. Such other relief that Neochloris is entitled to under law, and any other and further relief that this Court or a jury may deem just and proper.



**JURY DEMAND**

Neochloris demands a trial by jury on all issues presented in this Complaint.

DATED: December 3, 2014

Respectfully submitted,

/s/Paul K. Vickrey

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